

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: August 27, 2003

ATTY DOCKET NO.
2003-1240SERIAL NO.
NEW

10/648,393

APPLICANT
Makoto AKIZUKI et al.FILING DATE
August 27, 2003GROUP
1762

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
BP	AA	5,459,326	10/1995	Yamada			
	AB	5,110,435	5/1992	Haberland			
	AC	5,350,607	9/1994	Tyson et al.			
	AD	4,624,859	11/1986	Akira et al.			
	AE	4,066,527	1/1978	Takagi et al.			
	AF	4,882,023	11/1989	Wendman			
	AG	4,812,326	3/1989	Tsukazaki et al.			
	AH						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AI						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

BP	AJ	"NEW HORIZONS IN MATERIALS PROCESSING WITH ICB", Isao Yamada, Proc. 14th Symp. on ISIAT '91, Tokyo, (1991), Ion Beam Engineering Experimental Laboratory, pp. 227-235. (No month avail.)
	AK	"IRRADIATION EFFECTS OF A MASS ANALYZED GAS CLUSTER ION BEAM ON SILICON SUBSTRATES", Y. Yamashita et al., Proc. 1st Meeting on IESI '92, Tokyo, Ion Beam Engineering Experimental Laboratory, pp. 247,250. (No month avail.)
	AL	"Irradiation effects of gas-cluster Co ₂ ion beams on Si", I. Yamada et al., Nuclear Instruments and Methods in Physics Research B74 (1993) pp. 341-346. (No month avail.)
	AM	"Surface modification with gas cluster ion beams", I. Yamada et al., Nuclear instruments and Methods in Physics Research B79 (1993) pp. 223-226. (No month avail.)
	AN	"A Method and apparatus for surface modification by gas-cluster ion impact", J.A. Northby et al., Nuclear Instruments and Methods in Physics Research B79 (1993) pp. 336-340. (No month avail.)
	AO	"Cluster Formation in Expanding Supersonic Jets: Effect of Pressure, Temperature, Nozzle Size, and Test Gas", Hagena et al., The Journal of Chemical Physics, Vol. 56, No. 5, 1 March 1972, pp. 1793-1802.

EXAMINER

Piana

DATE CONSIDERED

5-4-4

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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BP ↓	AA	5,091,009	12/1989	Nogami et al.			
	AB	5,561,326	1/1993	Ito et al.			
	AC	5,527,731	6/1996	Yamamoto et al.			
	AD						
	AE						
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	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
BP ↓	AJ	4-354865	12/1992	Japan			X
	AK	5-102083	4/1993	Japan			X
	AL	60-14440	1/1985	Japan			X
	AM	63-38232	2/1998	Japan			X
	AN	6-224146	8/1994	Japan			X

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

BP	AO	"Micromachining with cluster ions", Henkes et al., Vacuum/volume 39, no. 6, pp. 541-542, 1989. (no month available)
—	AP	—
—	AQ	—
EXAMINER <u>Pianalto</u>		"Cluster Formation in Expanding Supersonic Jets: Effect of Pressure, Temperature, Nozzle Size, and Test Gas", Hagena et al., The

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Date 5-4-04